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COVID-19 vaccination hesitancy among healthcare personnel in the emergency department deserves continued attention



With nearly 100M reported infections and over 2M deaths, the COVID-19 pandemic has evolved into a generational medical crisis. Efforts to enact mitigating behaviors (e.g. mask wearing, social distancing) occurred simultaneous to worldwide endeavors at vaccine development. This culminated on December 8th, 2020, when the United Kingdom administered the first therapeutic dose of the Pfizer COVID-19 Vaccine [1]. While viewed as a massive medical achievement by worldwide governments and healthcare organizations alike, there is evidence the public remains skeptical of these novel and rapidly developed COVID-19 vaccines.

As recently as November 2020, only 29% of surveyed American responded they would “definitely” get the COVID-19 vaccine if made available [2]. Factors that may be negatively impacting vaccine acceptance include type of FDA approval (full vs. emergency use authorization) and foreign manufacturing origin [3]. Health Care Personnel (HCP) were not immune to uncertainty, with survey data from over 12,000 nurses reporting that 37% of respondents were “not confident” that the COVID-19 Vaccine was “safe and effective” [4]. Another study of HCP preliminarily reports 36% of respondents were willing to take the vaccine as soon as it was available, but 56% electing to wait for more vaccine safety data [5]. While there are some studies looking at vaccine acceptance “if available,” there is limited data on vaccine acceptance with vaccine “now available.”

Phase 1a of vaccine distribution began the week of December 14th, and according to the CDC/NIH-commissioned study, there are 24 million Americans in all of Phase 1, including 21 million HCP and 3-million residents of long-term care facilities (LTCFs) [6]. On December 17th, 2020, our healthcare system began administering initial vaccinations. A working group developed a survey using closed format and open format answer responses, with the aim to understand attitudes and characteristics of HCP in an Emergency Department (ED) who have been offered COVID-19 Vaccination. The survey was piloted for study performance and revised and distributed to HCP working in the emergency department from January 11th, 2021 to January 23rd, 2021. Responses were anonymous and voluntary. Descriptive analysis was performed.

The survey was sent to 398 HCPs who work in the ED at our large urban public hospital with an ED census of 130,000 per year with a response rate of 61% overall. 92% of respondents reported they received the vaccine or are scheduled to and 8% reported they will not be getting the vaccine. Median age range of the 240 HCP respondents was 41–50 years old, 136 (57%) were women, 99 (41%) were White, 57 (24%) were Black and 30 (13%) were Latinx. Response rate based on job category varied ranging from 31% to 100%. The largest categories

of employees in the ED included nurses, physicians and radiology technicians with vaccine acceptance rates of 43%, 82% and 33% respectively.

The characteristics of the 8% who will not be getting vaccinated included a majority of HCP who identified as black (65%), were 51–60 years old and job category varied. Respondents of our survey who said they will not get the vaccine wrote they had concerns over the vaccine being new, worried about side effects and stated that they had previous COVID infection. Prior COVID infection is not a contraindication to receiving the vaccine but the misinformation is leading to vaccine hesitancy and targeted education initiatives by healthcare systems to the least knowledgeable and most hesitant HCPs could prove to be the most influential.

More data defining the characteristics of the healthcare force can provide insight into vaccine hesitancy across the nation. Achieving high COVID-19 vaccine acceptance among health workers will not only protect colleagues, but also serve as an encouraging example to those who remain hesitant. Our respondents showed a high vaccine acceptance, but we acknowledge the 39% of staff who did not respond may not receive the COVID-19 vaccine. Although no clear correlation can be made based on our survey, a parallel between the respondent rate and the vaccination adoption rate among the HCPs in the ED may be an area of further research. It is important to note that there are differing rates and reasons to vaccine hesitancy nationally, an understudied aspect of vaccination roll out.

Vaccine hesitancy is a chronic public health threat and the WHO (World Health Organization) listed “vaccine hesitancy” as one of the top threats to global health in this same year [7]. Our findings in our large and diverse ED staff are likely generalizable to other healthcare settings and warrant urgent attention. Additionally, the early survey data can guide local education and recruitment efforts for improving vaccination rates in ED staff. HCP with questions concerning the safety of the vaccine need further support and targeted information to aid in their decision.

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